

Annexure I
Approved Curriculum of BSCS from 2k24 batch and Onwards

Code	Course Title	Domain	Cr Hr.
Semester 1			
CS101	Programming Fundamentals	Core	4 (3-1)
GE101	Application of Information & Communication Technologies	GER	3 (2-1)
GE102	Functional English	GER	3 (3-0)
GE103	Ideology and Constitution of Pakistan	GER	2 (2-0)
GE104	Discrete Structures	GER	3 (3-0)
DC101	Mathematical Foundation-I (for Medical Students) Non-Credit Hour	Deficiency	0
Total Credit Hours			15 (13-2)
Semester 2			
CS102	Object Oriented Programming	Core	4 (3-1)
GE105	Pakistan Studies	GER	2 (2-0)
CS104	Digital Logic Design	Core	3 (2-1)
GE106	Islamic Studies	GER	2 (2-0)
CS106	Data Structures	Core	4 (3-1)
DC102	Mathematical Foundation-II (for Medical Students) Non-Credit Hour	Deficiency	0
SS101	Supporting Elective I	Elective	2(2-0)
Total Credit Hours			17 (14-3)
Semester 3			
CS201	Database Systems	Core	4 (3-1)
CS202	Computer Networks	Core	3 (2-1)
GE201	Calculus and Analytic Geometry	GER	3 (3-0)
GE202	Expository Writing	GER	3 (3-0)
MT201	Multivariable Calculus	Maths	3(3-0)
SS201	Supporting Elective II	Elective	2(2-0)
Total Credit Hours			18(16-2)
Semester 4			
CS203	Computer Organization & Assembly Language	Core	3 (2-1)
CS204	Operating Systems	Core	3 (2-1)
CS205	Artificial Intelligence	Core	3 (2-1)

CS206	Theory of Automata	Domain Core	3 (3-0)
CS207	Software Engineering	Core	3 (3-0)
MT202	Linear Algebra	Math	3 (3-0)
Total Credit Hours			18 (15-3)
Semester 5			
CS301	Information Security	Core	3 (2-1)
CS302	HCI & Computer Graphics	Domain Core	3 (2-1)
CS303	Computer Architecture	Domain Core	3 (2-1)
CS304	Domain Elective I	Domain Elective	3 (2-1)
CS305	Domain Elective II	Domain Elective	3 (2-1)
MT301	Probability & Statistics	Math	3 (3-0)
Total Credit Hours			18 (13-5)
Semester 6			
CS306	Compiler Construction	Domain Core	3 (2-1)
CS307	Parallel & Distributed Computing	Domain Core	3 (2-1)
CS308	Domain Elective III	Domain Elective	3 (2-1)
CS309	Domain Elective IV	Domain Elective	3 (2-1)
EW301	Technical & Business Writing	EW	3 (3-0)
SS301	Supporting Elective III	Supporting Elective	2 (2-0)
Total Credit Hours			17 (13-4)
Semester 7			
CS401	Final Year Project – I	Core	3 (0-3)
CS402	Analysis of Algorithms	Core	3 (3-0)
CS403	Domain Elective V	Domain Elective	3 (2-1)
GE401	Entrepreneurship	GER	2 (2-0)
GE402	Civics and Community Engagement	GER	2 (2-0)
GE403	Applied Physics	GER	3 (2-1)
Total Credit Hours			16 (11-5)
Semester 8			
CS404	Final Year Project – II	Core	3 (0-3)

CS405	Data Sciences	Domain Elective	4(3-1)
CS406	Software Testing & Quality Assurance	Domain Elective	3 (2-1)
CS407	Advance Database Management Systems	Domain Core	3 (2-1)
GE404	Professional Practices	GER	2 (2-0)
Total Credit Hours			15 (9-6)

Overall BSCS Degree plan

#Course	Domain	#credits
14	Computing Core	46
6	Domain Core	18
7	Elective Domain	22
4	Mathematic Supporting	12
3	Elective Supporting	6
12	General Education Requirement	30
Total courses 46 & Total Credits		134

Approved Curriculum of BSIT from 2k24 and onwards

Code	Course Title	Domain	Cr Hr.
Semester 1			
IT101	Programming Fundamentals	Core	4 (3-1)
GE101	Application of Information & Communication Technologies	GER	3 (2-1)
GE102	Functional English	GER	3 (3-0)
GE103	Ideology and Constitution of Pakistan	GER	2 (2-0)
GE104	Discrete Structures	GER	3 (3-0)
DC101	Mathematical Foundation-I (for Medical Students) Non-Credit Hour	Deficiency	NC
Total Credit Hours			15 (13-2)
Semester 2			
IT102	Object Oriented Programming	Core	4 (3-1)
GE105	Pakistan Studies	GER	2 (2-0)
IT104	Digital Logic Design	Core	3 (2-1)
GE106	Islamic Studies	GER	2 (2-0)
IT103	Data Structures	Core	4 (3-1)
SS101	Supporting Elective I	Elective	2(2-0)
DC102	Mathematic Foundation-II (for Medical Students) Non-Credit Hour	Deficiency	NC
Total Credit Hours			17 (14-3)
Semester 3			
IT201	Database Systems	Core	4 (3-1)
IT202	Computer Networks	Core	3 (2-1)
GE201	Calculus and Analytic Geometry	GER	3 (3-0)
GE202	Expository Writing	GER	3 (3-0)
MT201	Multivariable Calculus	Math	3(3-0)
SS201	Supporting Elective II	Elective	2(2-0)
Total Credit Hours			18 (16-2)
Semester 4			
IT203	Computer Organization & Assembly Language	Core	3 (2-1)
IT204	Operating Systems	Core	3 (2-1)
IT205	Artificial Intelligence	Core	3 (2-1)

IT206	Domain Elective I	Domain Elective	3 (3-0)
IT207	Software Engineering	Core	3 (3-0)
MT202	Linear Algebra	Math	3 (3-0)
Total Credit Hours			18 (15-3)
Semester 5			
IT301	Information Security	Core	3 (2-1)
IT302	Domain Elective II	Domain Elective	3 (2-1)
IT303	DB Administration & Management	Domain Core	3 (2-1)
IT304	Web Technologies	Domain Core	3 (2-1)
IT305	Domain Elective III	Domain Elective	3 (2-1)
MT301	Probability & Statistics	Math	3 (3-0)
Total Credit Hours			18 (13-5)
Semester 6			
IT306	Information Technology Infrastructure	Domain Core	3 (2-1)
IT307	Parallel & Distributed Computing	Domain Core	3 (2-1)
IT308	Cyber Security	Domain Core	3 (2-1)
IT309	System & Network Administration	Domain Core	3 (2-1)
EW301	Technical & Business Writing	EW	3 (3-0)
SS301	Supporting Elective III	Elective	2 (2-0)
Total Credit Hours			17 (13-4)
Semester 7			
IT401	Final Year Project – I	Core	3 (0-3)
IT402	Analysis of Algorithms	Core	3 (3-0)
IT403	Domain Elective IV	Domain Elective	3 (2-1)
GE401	Entrepreneurship	GER	2 (2-0)
GE402	Civics and Community Engagement	GER	2 (2-0)
GE403	Applied Physics	GER	3 (2-1)
Total Credit Hours			16 (11-5)
Semester 8			
IT404	Final Year Project – II	Core	3 (0-3)

IT409	Domain Elective V	Domain Elective	4 (3-1)
IT408	Domain Elective VI	Domain Elective	3 (2-1)
IT407	Domain Elective VII	Domain Elective	3 (2-1)
GE404	Professional Practices	GER	2 (2-0)
Total Credit Hours			15 (9-6)

Overall BSIT Degree plan

#Course	Domain	#credits
14	Computing Core	46
6	Domain Core	18
7	Elective Domain	22
4	Mathematic Supporting	12
3	Elective Supporting	6
12	General Education Requirement	30
Total courses 46 & Total Credits		134